UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,705	11/14/2005	Geraldine Martin	PLAS-030	9359
32954 JAMES C. LYI	7590 12/23/200 OON	EXAMINER		
100 DAINGER	_	MOORE, MARGARET G		
SUITE 100 ALEXANDRIA	A, VA 22314		ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)	Applicant(s)			
		10/522,705	MARTIN ET AL.				
		Examiner	Art Unit				
		Margaret G. Moore	1796				
Period fo	The MAILING DATE of this communication ap or Reply	opears on the cover sheet with	n the correspondence ac	ddress			
WHIC - Exter after - If NC - Failu Any (ORTENED STATUTORY PERIOD FOR REPLEMENTED IN CHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statuted the provided by the Office later than three months after the mailing departed term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAL .136(a). In no event, however, may a report will apply and will expire SIX (6) MONTHE, cause the application to become ABAI	ATION. Ily be timely filed HS from the mailing date of this of NDONED (35 U.S.C. § 133).	•			
Status							
1) 又	Responsive to communication(s) filed on <u>03</u>	November 2008					
•		is action is non-final.					
3)	<i>'</i> —		rs prosecution as to the	e merits is			
٥/ك	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	·	Ex parto Quayro, 1000 O.B.	11, 100 0.0. 210.				
Dispositi	on of Claims						
4)🛛	4)⊠ Claim(s) <u>1 to 10, 12</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
· —	Claim(s) <u>1 to 10, 12</u> is/are rejected.						
· ·	Claim(s) is/are objected to.						
•	• • — •	or election requirement					
8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers						
9)	The specification is objected to by the Examir	ner.					
10)	The drawing(s) filed on is/are: a) ☐ ac	cepted or b) objected to by	y the Examiner.				
/—	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
				FR 1.121(d).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
,—	,						
Priority ι	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 11/3/08.	Paper No(s)/	mmary (PTO-413) Mail Date ormal Patent Application				

Application/Control Number: 10/522,705

Page 2

Art Unit: 1796

1. Claims 1 to 10 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The breadth of "under pressure" does not comply with the written description requirement because the specification in general is completely silent as to the application of pressure with the exception of specific amounts of pressure applied in the two working examples. In fact, it is not even clear from the two examples on page 18 what/if pressure is actually applied since kg/cm is not a recognized unit of measurement for pressure. These two shown pressures are not sufficient to support the breadth of the range as currently claimed, which has no lower or upper limit and embraces any amount of pressure. As such this newly added limitation is considered to be new matter.

- 2. While applicants' amendment has overcome some of the rejections in paragraph 1 of the previous office action, many of them are maintained. Please see below.
- 3. Claims 1 to 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1:

The phrase "-Ii = positive integer-" makes no sense. This applies as well to "-IIi = positive integer-". Likewise "Ii \geq 2 and IIi \geq 2" is confusing.

The entire phrase "and furthermore being fluid... or to emulsification" makes no sense and is confusing.

Regarding this phrase, applicants assert on the top of page 14 of their response that one or ordinary skill in the art would understand this phrase to require the liquid, crosslinkable silicone composition to be fluid, without having been diluted, dissolved or emulsified. This simply is not clear from the language actually used in the claim. The phrase "without having recourse either to…" does not convey what applicants state it is

Application/Control Number: 10/522,705 Page 3

Art Unit: 1796

meant to convey and, in fact, this phrase leaves one confused as to what is intended. This is true particularly in view of the fact that (h) allows for the presence of a diluent, solvent or emulsifier.

Claim 3:

It is unclear what is intended by "stage Ii ≥ 2 for application...". It is also unclear if the liquid silicone in this stage is the same as that required in claim 1. This claim is simply confusing.

Claim 4:

The definition of the formula (a.2) inappropriately defines W instead of Z.

Claim 12:

It is unclear what this weight limitation is directed to. It would appear that this limits the weight of the membrane per se, but since the membrane weight will be directly related to the weight of the weight of the substrate, it is unclear if this is applicants' intention.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1 to 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al.

The teachings in Mueller et al., and how they applied to the instant claims, were detailed in the previous office action. With regard to the newly added limitation that the impregnation occur under pressure, see the top of column 7, which teaches using an increased pressure during crosslinking.

Applicants' traversal is not persuasive.

They argue that the specific crosslinkable silicone elastomer must be selected from components (a), (b) and (c) (the middle of page 15 of the response dated 11/3/08). Patentees meet this requirement.

They also argue that the silicone composition must have a viscosity of 1000 to 7000 mPa.s. As noted in the previous office action, patentees teach a viscosity range of the composition that embraces the claimed range. See column 6, lines 24 and 25. From this one having ordinary skill in the art would have found a silicone composition having the claimed viscosity range to have been obvious. They argue that the presence of the fillers in Mueller et al. would make the viscosity too allow for impregnation, but since the viscosity in Mueller et al. can be as low as claimed, this is not persuasive. Applicants are reminded that patentees are not limited to the viscosities shown in their working examples. The Examiner also notes that the fillers in Mueller et al. are not excluded from the composition used in the method of claim 1.

Applicants also argue that the selection of the particular composition must submit to the test conditions cited. A composition meeting the necessary compositional requirements will inherently possess the same properties as that claimed. On the other hand, the working examples result in properties that meet those necessary to obtain the desired capillary rise. While the viscosity of these compositions may not meet that claimed, the Examiner notes that the skilled artisan would have expected somewhat comparable properties for the entire silicone composition disclosed therein. Thus, since the Shore A hardness values of the exemplary compositions in Mueller et al. range from 64 to 83, it is reasonable for the skilled artisan to expect a crosslinked silicone composition prepared from the same composition, albeit at a lower viscosity, to have a Shore A hardness of greater than 2 (one of the mechanical properties listed).

While patentees use the term "coat", many of the processes disclosed will allow for impregnation. For instance pouring, dipping and brushing will all allow time and/or conditions for impregnation. In addition, since pressure can be applied (top of column 7) this too will expedite impregnation. On the other hand, one having ordinary skill in the art would have found the impregnation of the textile fabric/glass fabric to have been

Application/Control Number: 10/522,705 Page 5

Art Unit: 1796

obvious in an effort to ensure a thorough coating and/or a final product having the desired and improved properties.

As such the Examiner maintains the obviousness of the instant claims.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/522,705 Page 6

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Margaret G. Moore/ Primary Examiner, Art Unit 1796

Margaret G. Moore Primary Examiner Art Unit 1796

mgm 12/10/08